

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of)	Attn: Certification Of Corrections
Jun-ichi Yoshida et al.)	
Patent No.: 6,710,135)	
Issued: March 23, 2004)	
Title: RESIN COMPOSITION AND USE)	
THEREOF)	

REQUEST FOR CERTIFICATE OF CORRECTION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Issuance of a Certificate of Correction for the above-captioned patent is respectfully requested in accordance with the accompanying Form PTO-1050.

- ☒ The requisite government fee of \$100 is authorized to be:
- ☐ charged to Deposit Account No. 02-4800; or
- ☒ charge to credit card.
- ☐ It is believed that payment of a fee is unnecessary.
- ☒ The reasons for the Request are set forth in the attached sheet.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. § 1.20(a) that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

Respectfully submitted,
BUCHANAN INGERSOLL & ROONEY PC

Date: November 18, 2009

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REASONS FOR REQUEST FOR CERTIFICATE OF CORRECTION

The original claims of the application that issued as U.S. Patent No. 6,710,135 recited, *inter alia*, a defined amount of "a polyalkylene carbonate (B) of the following formula (I)". In the first Official Action, the Examiner rejected certain claims, but only objected to claims 3-8 and indicated that such claims would be allowable if rewritten in independent form. Dependent claims 3 and 8 recited that the polyalkylene carbonate was polyethylene carbonate. In the response to the Official Action, claim 1 was amended to recite "a polyethylene carbonate (B)" and formula (I) was also amended. However, the definition of "m" was inadvertently left as being the original range of 1 to 15. Claims 3 and 8 were canceled.

By the instant Request for Certificate of Correction, the value of "m" is now being recited as being "1" which is consistent with the recitation of "a polyethylene carbonate (B)". In this regard, attached hereto is a Material Data Sheet for QPAC[®] 25 which shows that the repeating formula is $(C_3H_4O_3)_n$. In formula (I) of claim 1, R is the ethylene portion which is C_2H_4 . It can be understood that when "m" is 1, the formula (I) is the same as that in the Material Data Sheet. Thus, it is clear that the instant Request for Certificate of Correction does not raise any new question of new matter and is proper in all respects.

Should there be any questions concerning any aspect of this matter, the attorney of record can be contacted at the number provided above.



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Effective Date: November 1991
Revision Date: May 2009
Date Printed: 5/11/2009

MATERIAL

SECTION 1 - CHEMICAL PROPERTIES

Material Trade Name: QPAC® 25
Product/Chemical Name: Poly(ethylene carbonate)
Chemical Family: Aliphatic Polycarbonate

Manufacturer:
Empower Materials
91 Lukens Drive, Suite E
New Castle, DE 19720

SECTION 2 - COMPOSITION /

Ingredient (s)
Poly(ethylene carbonate) ($C_3H_4O_3$) _n
Ethylene carbonate
Methylene Chloride

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance: Clear to slight tan pellets

Odor: No Odor

- Avoid contact with eyes, skin or clothing. Do not swallow. Wear safety glasses.
- Wash thoroughly after handling. Use water and soap under fire conditions.
- During emergencies, wear equipment and run-off from entering sewer or water.

Potential Health Effects

Skin

Contact may cause mild irritation

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

onate)

Emergency Telephone Numbers:
Chemtrec 1-800-424-9300 U.S.
1-703-527-3887 International

2. INFORMATION ON INGREDIENTS

AS Number	%
16-49-1	94+ %
5-09-2	0 - 5 %
	0.2 - 1.0 %

3. HAZARD STATEMENT

to off-white granulates or powder

Avoid breathing dust or vapor from granulates or
resins and latex gloves.

adequate ventilation. May produce hazardous gases

Protect eyes, skin and respiratory tract. Prevent material
loss. Consult the Material Safety Data Sheet.

Eyes	Polymer dust is mildly irritating	yes. Treat as a nuisance dust and avoid eye contact.
Inhalation	Polymer dust causes discomfort	ed. Treat as a nuisance dust and avoid inhalation
Ingestion	Ingestion of product may cause n	nd vomiting.
Conditions aggravated by exposure	No human or animal health effect information on polymers of molecular w	are known to exist. However, available toxicity 300 or greater suggests they have low toxicity.
	May contain 0.2 – 1.0% methylene chloride carcinogen. ACGIH has published a TL	re methylene chloride is a suspected human 1 ppm (1993)

SECTION 4 - FIRST AID MEASURES

Eye Contact	Immediately flush with large quantities of water occasionally. Call a physician.	of water for 15 minutes while holding back eyelids
Skin Contact	In case of skin contact, wash with	and water.
Ingestion	In case of ingestion have victim conscious. Call a physician.	large quantities of water and induce vomiting if
Inhalation	Immediately remove victim to fresh	If breathing becomes difficult, call a physician.

SECTION 5 - FIRE FIGHTING

Flammable Properties

Flash Point:	NA
Auto ignition Temperature:	N/A

Explosion Limits

Lower:	N/A
Upper:	N/A

Extinguishing Media

Poly(ethylene carbonate) is a combustible material, such as water spray,

HAZARD PRECAUTIONS

the solid. Choose extinguishing media suitable for chemical, alcohol foam or carbon dioxide.

Unsuitable Extinguishing Media

No restrictions on media based on

edge of this material.

Special Fire Fighting Instructions

None required

SECTION 6 - ACCIDENTAL RELEASE MEASURES**Spills, Leak and Disposal**

- Incinerate under controlled conditions
- Dispose in approved landfills
- Observe governmental spill regulations

and proper ventilation.

water-quality regulations.

For spills and leaks, wear chemical coveralls. Contain spills and place contaminated clothing before reuse is complete.

Wear safety goggles, chemical resistant gloves, and apron or approved D.O.T. container and seal. Wash all contaminated area and clean spill site after material clean up is complete.

Large Spills

For larger spills requiring emergency response, follow OSHA regulations and NFPA 704. Contain spills and place in an approved container before reuse. Ventilate area

before reuse. In case of emergency response, respiratory protection may also be required. Consult the Material Safety Data Sheet for recommendation for respirator use (see 29 CFR 1910.120). Use approved D.O.T. container and seal. Wash all contaminated area and clean spill site after material clean up is complete.

SECTION 7 - HANDLING / STORAGE**Handling**

Avoid contact with eyes, skin or clothing. Wear gloves. Wash thoroughly after use. Recommended especially when using spray applications.

Do not swallow. Wear chemical safety goggles. General ventilation during normal use is recommended for spray applications.

Storage

Store in a cool and dry area. To prevent degradation, store in a refrigerator.

agglomeration of pellets, granulates, or powder,

Incompatibility

- Incompatible with strong oxidizers
- Temperature above 150 °C

agents

SECTION 8 - EXPOSURE CON

Ventilation

Local, mechanical exhaust ventil
processing or spray applications.
methylene chloride vapor conce

Personal Protective Equipment

Safety glasses and gloves.

Respiratory Protection

If excessive dusting occurs, wear

Skin Protection

Chemical resistant gloves and ap

Eye Protection

Safety glasses during normal use
provided in work area.

SECTION 9 - PHYSICAL AND

Appearance: Clear to slight tan

Odor: No odor

Boiling Point: Decomposes abov

Melting Point: NA

Specific Gravity: 1.38 – 1.42 (H₂O)

% Volatile by Vol.: Less than 5 weigh

Vapor Pressure: NA

Solubility in Water: Insoluble

pH Value: NA

AND PERSONAL PROTECTION

commended especially when used in thermal
areas must be well ventilated to maintain the
below 50 ppm.

MSHA approved dust/mist respirator.

wash fountain and emergency shower should be

ICAL PROPERTIES

or white to off-white granulates or powder

> (356 °F)

SECTION 10 - STABILITY AND

ACTIVITY

Stability

Stable.

Hazardous Polymerization

Does not occur

Hazardous Decomposition Products

Ethylene carbonate when burned
irritating aldehydes, acids and ket
conditions of decomposition or co
materials and/or environment of c

in toxic levels of carbon monoxide, carbon dioxide,
Other hazardous products may occur under
on, and/or result from interaction with other
position or combustion.

Materials and Conditions to Avoid

Keep away from excess heat and
decomposition, the polymer deco
decomposition of the polymer an
carbon dioxide, and other unknow
ethylene oxide causes tumors in l
Administration (OSHA) Permissi
an eight-hour time weighted aver

atures above 150°C. During the initial mild
primarily to ethylene carbonate. Further
ylene carbonate can produce ethylene oxide (EO),
rials both gaseous and solid. There is evidence that
ry animals. The Occupational Safety and Health
posure Level (PEL) for ethylene oxide is 1 ppm for
posure.

SECTION 11 - TOXICOLOGIC

FORMATION

Product Information

LD50 (oral, rat)

No Data Available

Acute Overexposure

No data is available on the health

of chronic exposure to this product.

Chronic Overexposure

No other effects besides those ass

with acute exposure.

Ingredient information

No other information.

SECTION 12 - ECOLOGICAL I

MATION

Ecotoxicity Data

No Data Available

SECTION 13 - DISPOSAL CON

Hazardous Waste Characteristic
None

Recommendation

Dispose of contaminated product or leaks in a manner approved for regulatory agencies to ascertain if effluent to the sewer may require systems.

RATIONS

containers and materials used in cleaning up spills material. Consult appropriate federal, state and local disposal procedures. Discharge of processing unit. DO NOT discharge effluent solutions to septic

SECTION 14 - TRANSPORTA

Ground Shipping Information

DOT Proper Shipping Name
None

Non-Hazardous for Transport
This substance is considered to be

Air (ICAO/IATA) Shipping Information

Proper Shipping Name
None

Non-Hazardous for Air Transport
This substance is considered to be

International Maritime Organization

IMDG Code
Not Applicable

Amdt. Code
Not Applicable

HTS Code
Not Applicable

INFORMATION

hazardous for transport.

hazardous for air transport.

Additional Shipping Class

SECTION 15 - REGULATORY

U.S. FEDERAL REGULATIONS

SARA LISTED: No

TSCA Inventory Item: No--Research and

SECTION 16 - OTHER INFORMATION

It is believed that the herein contained information is accurate. It is provided for the purpose of the product, as part of our product safety program. There is no claim made regarding an implied warranty, express warranty, and fitness for a particular purpose or merchantability by the information herein contained or regarding the product. We make available data sheets for our products, and we urge you to obtain for the products you buy, process, distribute, or use. You should advise the manufacturer if you may come in contact with our products of the herein contained information.

User should consult his legal advisor or attorney for the proper effect of any regulation or law regarding these matters.

OTHER INFORMATION

Development Exemption: TSCA 15 U.S.C. §2604(h) (3)

OTHER INFORMATION

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User should consult his legal advisor or attorney for the proper effect of any regulation or law regarding these matters. We do not undertake to provide advice on the applicability of any regulation or law regarding these matters.